

# OM420CMHMR16CSET120

## 4" CMH MR16 Downlight/Pinhole

CAT. NO:

TYPE:

PROJECT:

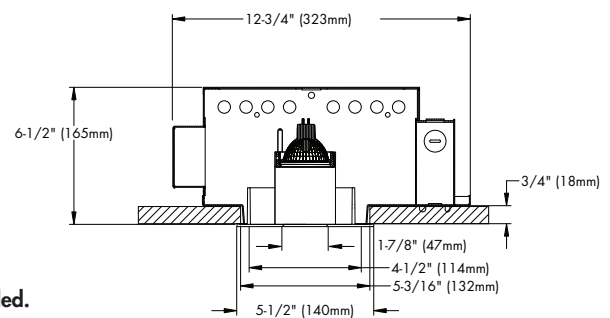
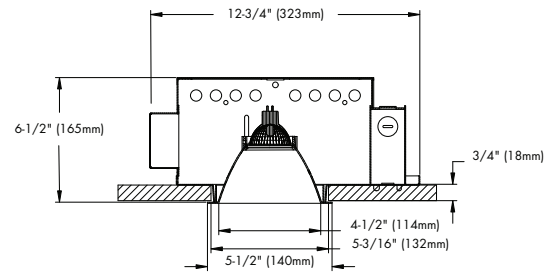
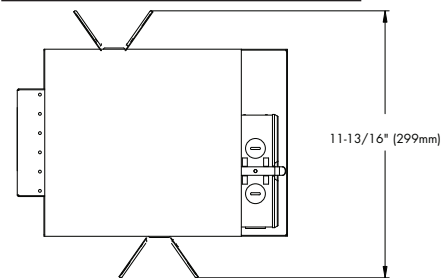
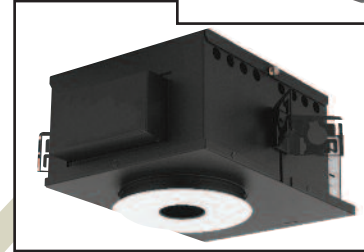
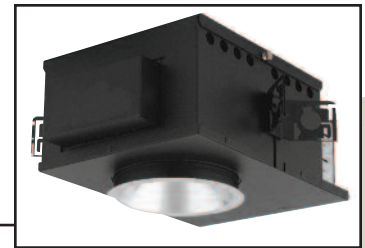
### PRODUCT INFORMATION

#### Applications

Small aperture, low brightness, metal halide downlight suitable for general or accent lighting in restaurants, museums, galleries, displays, lobbies, hotels, offices, or retail applications.

#### Specifications

- Housing** - Heavy 20 gauge formed steel housing features a matte black finish to suppress stray light.
  - Installation** - Mounting pan has pre-installed universal mounting brackets with vertical adjustment. Junction box and mounting brackets are accessible from below ceiling. Housing is accessible from above ceiling through removable top cover. For 24" C-channel hangers (pair), specify Q1032 accessory, ordered separately. For 27" flat bar hangers (pair), specify Q1031 accessory, ordered separately. For adjustable bar hangers (pair), specify Q1033 accessory, ordered separately.
  - Ballast** - Totally enclosed, High Power factor, with <10% THD electronic ballast with integral ignitor, thermally protected. Ballast requires a minimum starting temperature of -30° C. Ballast is either 120 volt, 60 Hz or 277 volt 60 Hz with a sound rating of "A" for indoor applications.
  - Socket** - Twist lock GX10.
  - Junction Box** - Extra large 32-cubic inch 16 gauge galvanized steel designed to meet U.L./NEC requirements. Approved for through branch wiring with up to 6 #12 AWG connectors.
  - Reflector** - Keyed trim assembly with torsion springs ensures proper installation and allows trim to hang hands-free during relamping. Optional polished flange matching reflector finish available, add FF to catalog number.
  - Pinhole** - Die-cast aluminum with white paint finish on ceiling plane and matte black finish on back for light suppression. The aperture is beveled to eliminate reflection.
  - Lamp Retention System** - Patented lamp retention spring holds the lamp and media captive and simplifies relamping.
  - Relamping** - Fixture is suitable for top and bottom relamping. Additional relamp label provided for commissioning.
  - Heat Sink** - Die-cast aluminum lamp and media cartridge dissipates heat to lower operating temperatures and lengthen lamp life.
  - U.L. Listed** - For use in IC or Non-IC damp locations and approved for Through Branch Circuit Wiring. I.B.E.W. union made.
- ♣ Canadian Specifications may vary from these shown, consult Canadian Division.



C-Channel not included.

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### CATALOG SYSTEM AND OPTIONS

EXAMPLE OF COMPLETE CATALOG NUMBER: **OM420CMHMR16CSET120**

OMEGA	Max Wattage/ Revelation 4" Lamp	Trim Finish	Flange Option	Supply Voltage	Bar Hanger Accessories
OM4	20CMHMR16	<p>CS Clear Specular</p> <p>CSS Clear Semi-Specular</p> <p>HZ Haze</p> <p>GS Gold Specular</p> <p>WT Wheat</p> <p>PW Pewter</p> <p>BZ Bronze</p> <p>BK Black Alzak</p> <p>WH White</p> <p>BB Black Baffle</p> <p>WB White Baffle</p> <p>PIN Pin Hole</p>	<p>Blank</p> <p>White</p> <p>FF Finish Flange (matches trim)</p>	<p>ET120 Electronic 120vac</p> <p>ET277 Electronic 277vac</p>	<p>Q1031 Flat Bar Hanger</p> <p>Q1032 Channel Bar Hanger</p> <p>Q1033 Adjustable Bar Hanger</p>



FIVE YEAR  
Warranty

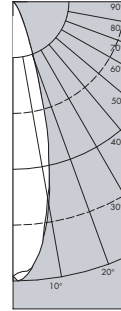
**OM420CMHMR16CSET120**

**Clear Specular Reflector**

Report Number: 27022  
 Lamp: (1) 20MHMR16  
 Total Lumens: 1000  
 Fixture Efficiency: = 95.2%  
 IES File: F27022.IES  
 S/MH Ratio = 0.5, 0.5  
 Beam Angle: 28.59

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	110.5	2 - 10
10	59.4	3 - 10
12	37.1	4 - 10
14	25.3	5 - 10
16	18.3	6 - 11

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	1	1	63
45	29	28	1451
35	102	119	
25	356	367	
15	1515	1604	
5	3135	3165	
0	3344	3344	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	RW	50	30	50	30	50	30	50	30
0	112	112	112	112	112	111	111	111	111
1	109	107	105	103	103	107	105	107	105
2	105	102	98	95	103	100	95	100	95
3	102	96	93	90	100	95	90	95	90
4	97	93	88	84	96	92	87	92	87
5	94	89	83	81	93	88	83	88	83
6	92	84	81	78	90	83	79	83	79
7	89	81	78	75	88	81	77	81	77
8	85	79	75	71	84	79	75	79	75
9	82	76	71	68	81	76	71	76	71
10	81	73	69	67	80	72	69	72	67

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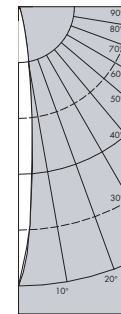
**OM420CMHMR16CSET120**

**Clear Specular Reflector**

Report Number: 27153  
 Lamp: (1) 20MHMR16  
 Total Lumens: 1000  
 Fixture Efficiency: = 90.4%  
 IES File: F27153.IES  
 S/MH Ratio = 0.2, 0.2  
 Beam Angle: 11.37

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	347.2	1 - 1
10	186.7	1 - 6
12	116.4	1 - 11
14	79.4	2 - 3
16	57.6	2 - 8

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	0
75	0	0	0
65	0	0	0
55	0	1	31
45	81	65	3717
35	58	68	
25	203	213	
15	851	897	
5	6033	5786	
0	10503	10503	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80			70			50		
	RW	50	30	50	30	50	30	50	30
0	108	108	108	108	108	105	105	105	105
1	104	102	101	98	102	100	98	102	100
2	101	97	94	93	98	95	93	98	95
3	97	93	91	88	95	93	89	95	93
4	94	90	86	83	93	89	85	93	89
5	92	86	83	81	91	85	81	91	85
6	90	83	81	78	89	83	79	89	83
7	88	81	78	76	86	81	77	86	81
8	84	80	76	73	84	79	75	84	79
9	82	78	73	71	82	77	73	82	77
10	81	76	72	69	81	76	72	81	76

\*Readings at working plane, 2'6" above floor. Beam Angle and Diameter Cutoff at 50% of max. Candlpower Coefficients used at effective reflectances of: 70% Ceiling, 50% Walls, 20% Floor

Additional photometric test files are available @ [omega-lighting.com](http://omega-lighting.com)



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